

Research Proposal Submission Guidelines and Priorities

For the Fisheries Scholarship Fund

Background and Description

The Fisheries Scholarship Fund (FSF), established in 1964, is a non-profit tax exempt organization dedicated to research, education and information that benefits the seafood industry and seafood consumers. The Fund is supported entirely by voluntary contributions from individuals and companies in the fish and seafood industry. The Fisheries Scholarship Fund supports the growth and vitality of the seafood industry and the health of seafood consumers. The sponsorship of issue-related research and the support and training of graduate students is of importance to the FSF's Board of Directors.

Each year, the FSF Board of Directors allocates funds to support research projects conducted at colleges, universities and philanthropic organizations that benefit the seafood industry and its consumers. The research priorities listed elsewhere on this form are set by the FSF Board of Directors in consultation with the Executive Committee of the National Fisheries Institute (www.nfi.org). Research results are published in peer reviewed journals and industry publications and made available to potential users.

Who selects the projects that are funded?

Research proposals funded by the FSF are often invited proposals, however, unsolicited proposals that address the research priorities identified by the FSF Board of Directors may also be selected for funding. Research proposals are reviewed by the technical staff of the National Fisheries Institute with the assistance of industry scientists and technical specialists representing a cross section of disciplines and responsibilities. By this process, proposals are evaluated each year to determine their value and potential benefit to the seafood industry as well as their technical merit. The proposals are ranked and submitted to the FSF's Board of Directors for final funding decisions each fall.

When is funding available?

The FSF funds a number of projects each year. Projects submitted for funding are evaluated prior to the FSF Board meeting in the fall of each year with a final determination rendered by the Board by November. Researchers are notified of the awards in December. Funding for projects approved by the Board is generally made available by March 1st of each year.

How much funding is available?

Funding for individual projects are set based on merit and level of priority. Though there is no cap on funding levels per project, typically projects are funded in a range of \$5,000 to \$20,000 per project per year. Multi-year funding is granted on a case-by-case basis.

The outcome of the pre-proposal review will be one of three responses:

1. Your proposal has been selected for consideration.
2. FSF is not interested in funding research on the proposed subject; or
3. Please make some modifications in what you are proposing and then send a revised proposal. Pre-proposals should address the priorities identified by the FSF Board and listed elsewhere in this document.

Proposals should be prepared according to guidelines provided herein. All proposals should be written with minimal jargon so that professionals from all disciplines can understand them. Successful proposals are directed toward important seafood industry problems; clearly written with well-defined objectives; brief (2-3 pages are typically sufficient) and priced with realistic budgets (other funding sources to complete the proposed work should be identified, if appropriate).

How can the money be used?

Funds can be used for graduate students, postdocs, technicians, research supplies, and work and meeting travel, as appropriate. Funds cannot be used for university overhead.

What are the deadlines for applying?

The research proposals should arrive at the FSF office before close of business on August 1st of each year or as specified in the covering letter for the solicitation.

Research Priorities

What needs have been identified as priorities?

Proposed research projects should be designed to provide information that has the potential to resolve industry problems and/or advance the vitality and growth of the seafood industry. The priorities are established by the FSF Board of Directors, in consultation the NFI Board of Directors. The following list is organized into two categories “Identified Priorities” and “Other Issues of Interest.” Each of the categories is further divided into overall subject areas. Funding for proposals fitting the “other issues” category will be based upon availability of the funds remaining after the proposals fitting the “priority” category are selected.

FSF realizes that new issues are always emerging and that scientists may see the importance of a potential problem that has not been recognized or cited as an industry research need. Researchers may submit proposals that address problems outside the industry issues listed herein but the submitter is urged to provide ample background and justification to explain the need for the research.

Identified Priorities

1. Benefits of Seafood and Placing Risks in Context

- A. Evaluation of the biological and physiological function of long chain omega 3 fatty acids and other nutrition components of fish in humans. Assessment and analysis of the impacts of fish and omega 3s when present or absent in the diet on human health as relates to: cardiovascular disease; brain and nervous system development and function; diabetes; cancer; immune function, etc.
- B. Evaluation of consumer perceptions of the health benefits and health risks associated with seafood, including consumer responses to positive health news, including nutrition and health claims, and negative messages such as fish consumption advisories and other risk communications.
- C. Analysis of the level and public health significance of contaminants, such as PCBs, dioxin, polybrominated diphenyl ethers (PBDEs or fire retardants), mercury, antibiotic residues, etc.
- D. Development of controls and mitigation procedures for minimizing the level of contaminants in seafood through growing, harvesting processing and handling procedures where applicable.

2. Importance of International Trade in Seafood

- A. Evaluation of economic benefits of seafood trade to the full value chain of the domestic seafood community (to include processors, distributors and retailers).
- B. Evaluation of economic impacts of changing tariff rates and non tariff barriers in Europe and Asia on U.S. exports of seafood products.

3. Fishery Economics and Resource Management

- A. Evaluation of the impacts and effectiveness of the present fishery management council system.
- B. Development of fisheries guides for seafood consumers that describe status of the stocks and characteristics of individual fisheries and the associated species and products produced from those fisheries.
- C. Evaluating economic impacts associated with changes in fisheries resources, supply and government policy.
- D. Assessing the value of the seafood industry to the economy.

4. Aquaculture

A. Consumer Acceptance:

Tracking and characterizing the consumer acceptance of aquaculture as a complement to wild capture seafood products.

B. Harvesting and Processing:

Identify issues that inhibit growth of the aquaculture sector, both in the U.S. and globally.

C. Composition, Quality and Safety of Feed and Fish Products

Identify feed ingredients, formulations, sources and feeding regimes that result in high quality and safe aquaculture fish products with healthy nutrition profiles (new for 2007)

5. Economic Integrity

A. Develop education and training materials to facilitate awareness of and adherence to existing government guidelines and standards pertaining to accurate product identity, product quantity declarations and proper application of food additives and processing techniques.

B. Develop efficient methods to measure and monitor for accuracy in product labeling and good manufacturing practices that address economic issues.

6. Food Safety

A. Microbial Contamination:

Tracking and characterizing the ecology and pathways of contamination of pathogenic microorganisms of concern in farmed and wild fish and shellfish (e.g. *Vibrios*, *Listeria monocytogenes*, *salmonella*, *C. botulinum* type E).

B. Processing:

Develop rapid, cost-effective, and specific methods of detecting microbial contamination. Study the feasibility and effectiveness of using processing technologies, antimicrobial treatments and other handling techniques to reduce microbial contamination.

Evaluate, develop, and refine effective HACCP controls for chemical, biological and physical hazards associated with seafood processing. Evaluate and develop effective implementation strategies for chemical and microbiological controls, and monitoring and verification procedures in processing plants.

C. Post Processing:

Evaluate the impact of time temperature controls during post processing storage and transportation on pathogen growth, including *C. botulinum* and *Listeria*, in ready to eat seafood.

Determine the feasibility of initiating safety based date labeling to minimize risks associated with pathogens in ready to eat seafood.

Determine how to increase consumer acceptance of irradiated food.

Determine the effects of harvesting and post harvesting procedures on scombroid (histamine) development and develop control strategies for species subject to the development of high levels of histamines.

Develop and evaluate efficient systems for tracking seafood through various levels from harvest through distribution.

Other Issues of Interest

- **Product Quality**
- **Value added Processing**
- **Waste and By-Product Development**

Proposal Format and Submission Guidelines

What is the procedure for submitting my proposal?

Applicants must submit 2 copies of proposals to the association. One copy should be sent to the attention of the Fisheries Scholarship Fund c/o National Fisheries Institute, 7918 Jones Branch Dr., Suite 700, McLean, VA 22102 (bcollette@nfi.org) and one copy to Roy Martin, 11283, Hickory Ridge Ct., Spring Hill, FL 34609, (remtec@atlantic.net).

What are the Timelines for submission?

Unless otherwise posted, the FSF research priorities will be updated the end of June and the submission deadline for proposals will be early September.

Proposal Guidelines

Every effort should be made to limit the number of pages for Items 1-4 to 3 pages or less. Items 1-15 should have page numbering and the proposal should be dated.

1. Title of Project

2. Investigator(s)

3. Objectives: List the specific goals of the project and briefly describe the approaches to be used to achieve the objectives; and the probable value to the industry if the research objectives are achieved.

4. Literature Review:

(a) When appropriate indicate how this proposal differs from previous or current research.

5. Abbreviated Resume of Investigator (one to two pages)

6. Current Research on Subject (if any) by Investigator

7. Facilities and equipment required and available for the project

8. Research Timetable:

(a) Date project is scheduled to begin.

(b) Date project is scheduled to end.

9. Personnel Support Provided by the University (or research organization)

10. Financial Support from: (a) the university (b) From other sources, including requests for other funding for the project.

11. Budget: Direct cost factors attributed to the project.

12. Total Funds Requested: Unexpended funds at the termination of the project may be used at the discretion of the principal investigator if these funds are no more than 5 percent of the total award or \$1,000. Funds in excess of 5 percent of the award or \$1,000 should be returned to FSF.

13. Receipt of Funds: Unless otherwise requested funds are made available in two payments with 90% made available in the first quarter of each calendar year and the final payment of 10% issued upon receipt of the final project report. Researchers should indicate full name and mailing address of grantee and, if different payee.

Terms of Agreement

The researcher agrees to provide the following:

(a) Progress reports on the research project every six months until the project is completed This report does not need to include detailed charts or figures;

(b) Within three months following completion of the research funded, to provide the final project report of the results. If the research funded by FSF results in one or more

published papers, the “Fisheries Scholarship Fund” should be acknowledged for its support.

(c) The University understands that 10 percent of the approved funds will be retained until the final report has been provided to the FSF; and

(d) Give permission to FSF to provide the information to the industry.
(FSF makes no claim on discoveries or invention patents made by scientists/institutions utilizing its research funds. FSF assumes no liability associated with either the conduct of research or the outcome or use of research findings acquired with its funds).